

REMARKS

By the present Amendment, minor editorial revisions have been made throughout the specification and the Abstract has been replaced with one that is believed to conform with accepted guidelines. The claims, however, have not been amended since applicants respectfully submit that the claims of record are patentable over the cited document for the reasons which follow.

As explained in greater detail in the specification, one aspect of the present invention relates to a lactic acid-based resin composition comprising a mixture of a mixture (A) of polylactic acid (a1) and an aliphatic polyester (a2), and an aliphatic block co-polyester (B) having a polylactic acid segment and an aliphatic polyester segment. The aliphatic block co-polyester (B) satisfies conditions (1) to (3) which are defined as follows:

- (1) it contains a lactic acid component in an amount of from 20 to 80 wt% in terms of monomer,
- (2) it has a weight average molecular weight of 1,000 or more and less than 60,000, and
- (3) it has a weight average molecular weight of the polylactic acid segment of from 500 to 55,000 and a weight average molecular weight of the aliphatic polyester segment of from 500 to 55,000.

The plain language of independent claim 1 (as well as independent claim 12) defines the presence, *inter alia*, of an aliphatic block co-polyester (B) having a polylactic acid segment and an aliphatic polyester segment and which satisfies conditions (1) to (3). The importance of this aspect of the invention is set forth in the specification and particularly

the technical evidence provided therein. For instance, as can be understood from the advantageous properties set forth in Table 2 on page 34 of the specification, when one follows the present invention, one can successfully obtain a product that exhibits good characteristics. In contrast, when a composition is provided that is outside the composition defined in the independent claims (e.g., see Table 3 on page 36), significantly inferior results can occur. In this respect, applicants respectfully note that Comparative Example 1-2 which uses a **random** co-polyester (see the description provided on page 28), provides substantially inferior results, such as poor spinning and reduced strength, compared to the results set forth with regard to illustrative embodiments of the present invention set forth in Table 2.

Nakata et al., United States Patent Application Publication No. 2002/0094444, does not disclose or suggest the invention as defined in the claims of record. Nakata et al. relates to 14 different embodiments with embodiment [VI] (the one relied on by the Examiner in the Official Action) relating to a biodegradable resin composition layer comprising 85-5% by weight of a polylactic acid-based resin (A), 5-50% by weight of an aliphatic polyester resin (B), and 10-45% by weight of a polycaprolactone-based resin (C) with a total amount of (A), (B), and (C) totalling 100% by weight. As the Examiner has noted, section [0359] discloses that the polycaprolactone-based resin (C) can be a homopolymer of a polycaprolactone or a copolymer of the polycaprolactone with another aliphatic hydroxycarboxylic acid, such as the ones previously described in the document. In the Examples with exemplify this embodiment of Nakata et al. starting at section [0908], a polycaprolactone homopolymer (i.e. PCL-H7) is used.

As should be apparent those of ordinary skill in the art from the discussion provided above, Nakata et al. does not in any way disclose or suggest the presently claimed composition with the defined aliphatic block co-polyester. There is absolutely nothing in Nakata et al. which would lead one skilled in the art to the use a block co-polyester in a mixture with polylactic acid and an aliphatic polyester and clearly nothing within the document which would lead to an understanding of the significant improvements which the present invention can obtain. This particularly true with respect to the improvements over a random copolymer which have been shown in the aforementioned evidence provided in the specification. Moreover, since Nakata et al. does not remotely teach the claimed block co-polyester, it follows that the document further does not teach conditions (1) to (3) as set forth in the claims which relates to the defined block co-polyester. In this latter regard, referring back to the Comparative Examples provided in Table 3, it will be noted that Comparative Example Nos. 1-4 to 1-6 use a block co-polyester (i.e., 5-6, 5-7 and 5-8) which do not meet each of conditions (1) to (3) (as can be understood from Table 1 on page 29) and result in significantly inferior results compared to the inventive Examples forth in Table 2. Thus, such evidence provides an understanding that the defined conditions are not inherent in all block co-polyesters and further supports the conclusion that the claims of record are patentable over Nakata et al..¹

¹With respect to the Examiner's comments regarding optimization, applicants note the decision in *In re Antonie*, 195 USPQ 6 (CCPA 1977) where the court reversed a rejection based on obviousness and in doing so in part stated:

The PTO and the minority appear to argue that it would

(continued...)

For all the reasons set forth above, applicants respectfully submit that the present invention is neither anticipated nor rendered obvious by the teachings of Nakata et al., particularly in light of the technical evidence that has been presented. Therefore, reconsideration and allowance of the present application are requested.

Should the Examiner wish to discuss any aspect of the present application, she is invited to contact the undersigned attorney at the number provided below.

Respectfully submitted,

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¹(...continued)

always be *obvious* for one of ordinary skill in the art *to try varying* every parameter of a system in order to optimize the effectiveness of the system even if there is no evidence in the record that the prior art recognized that particular parameter affected the result. As we have said many times, *obvious to try* is not the standard of 35 U.S.C. §103. (citation omitted and original emphasis at page 8).